

**DOCUMENTATION OF ENVIRONMENTAL  
INDICATOR DETERMINATION**

Interim Final 2/5/99

**RCRA Corrective Action  
Environmental Indicator (EI) RCRIS code (CA725)  
Current Human Exposures Under Control**

Facility Name: DuPont Chambers Works  
 Facility Address: Deepwater, NJ  
 Facility EPA ID #: NJD 002385730

1. Has all available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination?

If yes - check here and continue with #2 below.

If no - re-evaluate existing data, or

if data are not available skip to #6 and enter "TN" (more information needed) status code

**BACKGROUND**

**Definition of Environmental Indicators (for the RCRA Corrective Action)**

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

**Definition of "Current Human Exposures Under Control" EI**

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

**Relationship of EI to Final Remedies**

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives, which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

**Duration / Applicability of EI Determinations**

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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2. Are groundwater, soil, surface water, sediments, or air media known or reasonably suspected to be “contaminated”<sup>1</sup> above appropriately protective risk-based “levels” (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

Media	Yes	No	?	Rationale/Key Contaminants
Groundwater	X			Constituents of potential concern (COPCs) in site-wide groundwater include: aniline, benzene, chlorobenzene, trichloroethene, tetrachloroethene, and lead (see Tables 1 through 5).
Air (indoors) <sup>2</sup>		X		Volatile organic compounds (VOCs) have been detected in groundwater at the site. However, there were no VOCs that exceeded the vapor intrusion screening levels (DuPont CRG, 2003d).
Surface Soil (e.g., <2 ft)	X			Organics and metals exceeded screening levels in surface soil from Carneys Point SWMUs (see Table 6) and Plant Area SWMUs (see Table 7).
Surface Water	X			Organics and metals were detected above screening levels at the site (see Tables 10, 12, 14 and 16)
Sediment	X			Organics and metals were detected above screening levels at the site (see Tables 13 and 15)
Subsurface Soil (e.g., >2 ft)	X			Organics and metals exceeded screening levels in subsurface soil from Carneys Point SWMUs (see Table 8) and Plant Area SWMUs (see Table 9).
Air (outdoors)		X		Not considered a media of concern. See rationale for more information.

If no (for all media) - skip to #6, and enter “YE,” status code after providing or citing appropriate “levels,” and referencing sufficient supporting documentation demonstrating that these “levels” are not exceeded.

X If yes (for any media) – continue after identifying key contaminants in each “contaminated” medium, citing appropriate “levels” (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

If unknown (for any media) – skip to #6 and enter “IN” status code.

**Rationale and Reference(s):**

**Screening levels used to evaluate site data**

Concentrations of constituents detected in environmental media during three RCRA Facility Investigations (RFI), from New Jersey Pollutant Discharge Elimination System (NJPDES)-Discharge to Groundwater (DGW) permits programs, and from voluntary investigations were compared to appropriate screening levels to assess potential impact to human health and the environment and to identify COPCs. The following screening levels were utilized during the evaluation:

<sup>1</sup> “Contamination” and “contaminated” describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based “levels” (for the media, that identify risks within the acceptable risk range).

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- ❑ **Groundwater:** Groundwater is only extracted for non-potable purposes at the Chambers Works facility. However, the potential for human exposure to groundwater is primarily related to groundwater discharge to surface water. A portion of impacted groundwater beneath the Chambers Works facility (northern Carneys Point, Fluoroproducts, and Antiknocks areas) discharges to the Delaware River, which is used as a drinking water supply downstream of the facility. Likewise, a portion of groundwater discharges to the Salem Canal, which is used as a potable water intake for the facility. As a result, constituents detected in groundwater were compared to the New Jersey Groundwater Quality Class IIA Criteria (GWIIA).
- ❑ **Soil or Sediment:** Soil and sediment concentrations were compared to New Jersey Nonresidential Direct Contact Soil Cleanup Criteria (NRDCSCC). This is considered a very conservative screening for sediment, because exposure to sediment would be less frequent than the assumptions used in the development of NRDCSCC levels; and
- ❑ **Surface Water:** Surface water concentrations were compared to New Jersey Ambient Water Quality Criteria (AWQC) (N.J.A.C 7:9B) for protection of human health or Federal AWQC (40 CFR Part 131), where AWQC were unavailable. If criteria were not available from either source, then concentrations were compared to GWIIA criteria.
- ❑ **Indoor Air:** Five wells across the site were selected to represent worst-case groundwater quality. Wells were selected from various locations to capture the chemical diversity of the manufacturing areas across the site. Included in this evaluation were the following monitoring wells: G05-P02B, D15-M01B, E15-M01B, L13-M01B and H13-M01B. Since the Site is industrial, the Occupational Safety and Health Administration (OSHA) permissible exposure levels (PELs) and the American Conference of Governmental Industrial Hygienist (ACGIH) threshold limit values (TLVs) were used to develop appropriate indoor air target concentrations for potential on-site exposure rather than use the residential indoor air target concentrations provided in the draft guidance. Appendix B presents the equation used to develop the screening criteria.

**Groundwater:** Previous environmental investigations conducted at the site have identified aniline, benzene, chlorobenzene, trichloroethene, tetrachloroethene, and lead as the primary COPCs in groundwater. The Interceptor Well System (IWS) maintains groundwater containment along the site perimeter in the C, D, and E aquifers, and most of the B aquifer. In addition, the Chambers Works facility has two approved groundwater Classification Exception Areas (CEAs) that cover the entire site. CEA 1 covers groundwater south of Henby Creek, and CEA 2 covers groundwater north of Henby Creek. A CEA has the effect of suspending the designated uses (potable for the Class IIA Quaternary Aquifer and Potomac Raritan Magothy Aquifer System beneath the site) and constituent standards in the indicated area for the duration of the operation of the recovery systems.

**Indoor Air:** An evaluation of the vapor intrusion to indoor air from groundwater and soil pathways was detailed for the Chambers Works facility in a report submitted to USEPA on July 23, 2003. The evaluation, which followed the principles outlined in the draft Guidance (*Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils, Subsurface Vapor Intrusion Guidance, November 2002*), concluded that there were no VOCs that exceeded the screening levels. Therefore, vapor intrusion of VOCs from groundwater to indoor area is not expected to be a potential concern. Soil data were excluded from the indoor air evaluation. The draft vapor intrusion guidance does not recommend the use of soil concentrations because of the large uncertainties associated with using them. However, soil concentrations provide useful information in identifying potential source areas. At the Chambers Works facility, groundwater is very shallow (approximately 3 to 6 feet below ground surface). Therefore potential source areas in the subsurface soil would likely be in or very near the saturated zone (DuPont CRG, 2003d).

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**Surface soil:** The previous environmental investigations at the Chambers Works facility have identified, lead, tetraethyl lead (TEL), benzo(a)pyrene, 1,2-dichlorobenzene (ODBC) and 2,4-dinitrotoluene as COPCs in surface soil. The primary locations of these exceedances occur in areas away from site operations, have limited access, are located in remote portions of the site, or are gravel-covered, paved, or covered by old foundations/existing buildings.

**Surface Water:** Previous environmental investigations at the Chambers Works facility have identified metals (Henby Creek and Bouttown Creek) and organics (Salem Canal and B Basin) above screening levels. In order to clear accumulated vegetation, maintenance of the basins is occasionally completed by on-site personnel. This maintenance is done on an as-needed basis, not routinely.

**Sediment:** Previous environmental investigations at the Chambers Works facility have identified metals and organics as COPCs collected from Bouttown Creek and Henby Creek. Impacted sediment has also been identified at SWMU 52. These sediments were evaluated as soils.

**Subsurface soil:** The previous environmental investigations at the Chambers Works facility have identified, lead, TEL, zinc, benzo(a)pyrene, ODBC and 2,4-dinitrotoluene as COPCs in subsurface soil. COPCs would be accessible only during intrusive activities.

**Air (outdoors):** Most SWMUs, where constituents in surface soil exceed screening levels, are covered by building foundations, asphalt, concrete or crushed stone, or are located in remote/inactive portions of the facility; thereby, minimizing potential exposure to soil. In addition to these covers, excavation limitations are in place to ensure the appropriate personal protective equipment (PPE) is used if soil is disturbed.

During the Phase III RFI, air sampling was performed at SWMU 57 and SWMU 6 in two areas without surface cover and in gravel covered areas where elevated TEL levels were detected in the Phase II investigation. Air samples were collected from seven sample locations to evaluate potential exposure to workers in these areas for lead and TEL. The results were below the detection limits (0.1 ug/sample for TEL, 0.3 ug/sample for total lead) (see Appendix C).

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3. Are there **complete pathways** between “contamination” and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

**Potential Human Receptors (Under Current Conditions)**

<b>Contaminated Media</b>	<b>Worker</b>	<b>Day-Care</b>	<b>Construction</b>	<b>Trespasser</b>	<b>Recreation</b>	<b>Food<sup>3</sup></b>
Groundwater	Yes		Yes		N/L	
Air (indoors) <sup>2</sup>						
Surface Soil (e.g., <2 ft)	Yes		Yes		No	
Surface Water	Yes		Yes		Yes	
Sediment	Yes		Yes		Yes	
Subsurface Soil (e.g., >2 ft)	Yes		Yes		N/L	
Air (outdoors)						

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strikeout specific Media including Human Receptors' spaces for Media which are not (“contaminated”) as identified in #2 above.
2. Enter “yes” or “no” for potential “completeness” under each “Contaminated” Media – Human Receptor combination (Pathway).
3. Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

Note: In order to focus the evaluation to the most probable combinations some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“\_\_\_”). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

\_\_\_\_\_ If no (pathways are not complete for any contaminated media-receptor combination) – skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

  X   If yes (pathways are complete for any “Contaminated” Media – Human Receptor combination) - continue after providing supporting explanation.

\_\_\_\_\_ If unknown (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code

Rationale and Reference(s):

Potential human receptors include:

- On-site industrial worker:** The on-site industrial worker is potentially exposed to constituents in surface soil (0 to 1 foot below ground surface (bgs)), surface water and sediment during clearing of accumulated vegetation in plant basins, and potential exposure to groundwater during operation of the groundwater containment systems. Potential exposure pathways are therefore incidental ingestion of and dermal contact with groundwater, surface soil, surface water and/or sediment.

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- ❑ **On-site construction/excavation worker:** The on-site construction/excavation worker is potentially exposed to constituents in all environmental media during excavation (i.e., repair of subsurface utility lines) or during construction (i.e., rail renovations). Subsurface soil depths for direct contact exposures by this receptor are defined as 1 to 12 feet bgs, based on past activity at the facility and location of utilities on-site. Groundwater occurs at depths as shallow as 3 feet bgs at the site; therefore, direct contact with groundwater may occur during intrusive activities. This category also addresses personnel conducting environmental or geophysical investigations at the site. Potential exposure pathways are therefore incidental ingestion of and dermal contact with soils and/or sediments, incidental ingestion of and dermal contact with groundwater and surface water and inhalation of vapor phase chemicals released from groundwater to a confined space (trench).
- ❑ **Recreational user of the Delaware River:** The recreational user is potentially exposed to constituents in surface water and sediment of the Delaware River. Potential exposure pathways are, therefore, incidental ingestion of and dermal contact with surface water and sediment.

The Chambers Works facility is fenced and security controls access to the site 24 hours a day. Routine security patrols are also conducted throughout the site. Therefore, trespassers were not considered potential receptors. ~~Exposure to SWMUs which are located outside of the fence (SWMU 5, SWMU 52, SWMU 55-7, and SWMU 60) will be addressed under the recreational use scenario.~~

Groundwater contamination is contained on-site by the IWS and other containment measures (i.e., SWMU 5 slurry and sheet pile walls and E aquifer recovery well J05-W01E). As a result, ~~no off-site migration of impacted groundwater is occurring.~~ Therefore, off-site residents exposed to groundwater were not considered potential receptors.

Sensitive receptors (daycare) have not been identified adjacent to the site.

#### Complete Exposure Pathways by Media:

**Groundwater:** The potential for exposure is low since groundwater is contained on-site by the IWS; and, where groundwater is impacted at specific SWMUs, groundwater is not used for any purpose. However, due to the shallow depth of groundwater in some portions of the site exposure may occur during construction/excavation activities. In addition, exposure to groundwater may occur during operation of the groundwater IWS and other containment systems. Potentially complete exposure pathways may include: on-site industrial worker: - incidental ingestion of and dermal contact with groundwater; and on-site construction/excavation worker - incidental ingestion of and dermal contact with groundwater, and inhalation of vapor phase chemicals released from groundwater to a confined space (trench).

**Surface Soil:** The potential for exposure to contaminants in surface soils is limited to on-site receptors since impacted soils are contained within the facility boundaries. Potentially complete exposure pathways may include the following: on-site industrial worker and on-site construction/excavation worker: incidental ingestion of and dermal contact with surface soil.

**Surface Water and Sediment:** The Delaware River in the vicinity of Chambers Works continues to be highly industrialized and subject to a number of point and non-point discharges, as well as heavy shipping traffic. The river is tidal, and the intertidal sediments along the shoreline are exposed only periodically. Access to this area by recreational users is limited to watercraft access. It is highly unlikely, but possible, that an individual in a watercraft might choose to wade or swim in the shallows where SWMU 52/60 is located and thus be exposed to COPCs present in sediment and the water column. Complete exposure pathways for Salem Canal surface water are limited to a small area located inside the boom/silt curtain proximate to the seep discharge point. Access to the seep area is restricted. However, construction/excavation work (such as during environmental investigations) may occur in this area, as well as other on-site surface water bodies. In addition, maintenance of the basins is occasionally completed by on-site personnel to clear accumulated vegetation. This maintenance is done on an as-needed basis, not

**On page x, 3<sup>rd</sup> paragraph:** The last sentence is revised to “Exposure to SWMUs which are located outside of the fence (~~SWMU 5~~, SWMU 52, and SWMU 60) will be addressed under the recreational use scenario.”

*Revised complete*

**On page x, 4<sup>th</sup> paragraph:** A sentence “no off-site migration of impacted groundwater is occurring.” is replaced with a new sentence “no off-site migration of impacted groundwater is occurring that would pose an unacceptable risk to human health.”

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routinely. Potentially complete exposure pathways may include: on-site industrial worker, on-site construction/excavation worker and recreational user of the Delaware River- incidental ingestion of and dermal contact with surface water and sediment.

**Subsurface Soil:** Because subsurface soil contamination is only present on-site, and exposure to subsurface soil is only achieved during excavation and construction activities, the only potential receptor is the on-site construction/excavation worker. Potentially complete exposure pathways may include incidental ingestion of and dermal contact with subsurface soil.

**Incomplete Exposure Pathways by Media:**

**Groundwater:** The Chambers Works facility has two approved groundwater CEAs that cover the entire site. A CEA has the effect of suspending the designated uses (potable for the Class IIA Quaternary Aquifer and Potomac Raritan Magothy Aquifer System beneath the site) and constituent standards in the indicated area for the duration of the operation of the recovery systems. In addition, groundwater is not used for potable water at the Chambers Works facility. Potable water is obtained from an intake on the Munson Dam, in Salem Canal. As previously discussed, constituents are non-detect at the potable water intake. Therefore, direct contact (ingestion or dermal contact) with potable groundwater for on-site industrial workers is incomplete.

The potential exposure pathways related to food would be indirect exposure from fish or aquatic organisms in surface water. However, exposure pathways associated with food are incomplete. ~~An Environ study demonstrated that the concentrations in the B Aquifer groundwater discharging into the Delaware River are below levels of concern due to tidal mixing in the aquifer before groundwater discharge (DuPont CRG, 1999b).~~

**Soil:** Because the day-to-day operations of the on-site industrial worker do not include intrusive activities, direct contact (ingestion or dermal contact) with subsurface soil is not anticipated and is incomplete. Likewise, if surface soil contamination exists in an area of the site, which is not routinely accessible to on-site industrial workers due to institutional or physical controls (e.g., locked areas or asphalt caps), then exposure pathways in those areas are incomplete as well.

**Surface Water and Sediment:** Portions of Henby Creek and Bouttown Creek which have been impacted by site operations are contained within the Chambers Works property. Therefore, fencing around the property eliminates recreational activities (i.e., fishing) in these areas. In addition, neither of these areas are used for drinking water purposes. Similarly, B Basin does not provide for productive aquatic habitats, nor can it be used for recreational activities or drinking water purposes.

Since the SWMU 52 COPCs identified in the Delaware River have low octanol water partition coefficients ( $K_{ow}$ ), it is unlikely that they would accumulate in fish tissues. Therefore, potential exposure to COPCs via ingestion of fish is expected to be negligible to nonexistent. Likewise, the boom/silt curtain has been effective in limiting the area of ecological exposure in the Canal due to the seep. Given that the measured concentrations for most constituents were limited to the enclosure, there is little potential for these constituents to accumulate via surface water in Salem Canal aquatic community (DuPont CRG, 2003c). In addition, fishing occurs primarily upstream in Salem Canal away from the seep area.

**On page xi, 4<sup>th</sup> paragraph:** The last sentence “An Environ study demonstrated that the concentrations in the B Aquifer groundwater discharging into the Delaware River are below levels of concern due to tidal mixing in the aquifer before groundwater discharge (DuPont CRG, 1999b).” is revised to “Based on information available as of the review and preparation of this Human Environmental Indicator (CA725) for the DuPont Chambers Works, Deepwater, New Jersey facility, there would be no significant human exposure risk in the Delaware River in the vicinity of the groundwater to surface water discharge.”

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4. Can the exposures from any of the complete pathways identified in #3 be reasonably expected to be “significant”<sup>2</sup> (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?

X If no (exposures can not be reasonably expected to be significant (i.e., potentially “unacceptable”) for any complete exposure pathway) - skip to #6 and enter “YE” status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”

If yes (exposures could be reasonably expected to be “significant” (i.e., potentially “unacceptable”) for any complete exposure pathway) - continue after providing a description (of each potentially “unacceptable” exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”

If unknown (for any complete pathway) - skip to #6 and enter “IN” status code

Rationale and Reference(s):

**Groundwater Exposure Pathways:** Potential exposure for an on-site industrial worker and on-site construction/excavation workers to groundwater is not significant due to the strict adherence to a rigorous system of policies and procedures employed at the Chambers Works facility to protect against unacceptable exposures. The Chambers Works facility utilizes a permitting process that requires Chambers Works Environmental Affairs’ authorization for any intrusive activities (boring, drilling, excavation, etc.) into the soils or building foundations at the facility. The purpose of the permitting process is to ensure that appropriate measures are taken for personnel protection should the intrusive activity encounter impacted soils or groundwater. The site environmental support personnel provide the requirements on appropriate personal protective equipment (PPE). Also, workers who engage in intrusive activities in impacted areas are required to be OSHA 1910.120 trained.

**Surface Soil Exposure Pathways:** Institutional controls are in place to prevent disturbance of soil (both surface and subsurface) such that on-site receptors will not become exposed to contaminants. These controls include permits, deed restrictions, and security patrols. PPE requirements further prevent exposure to contamination. Areas where surface soil exceeds screening criteria are located in remote or inactive portions of the plant; are paved or covered by old foundation and existing buildings; either heavily vegetated or a gravel cover is present; or access is restricted due to security fencing. As a result, the frequency and duration of potential exposures would be extremely small in magnitude due to site access restrictions and the exposure to impacted surface soil is not significant.

**Surface Water and Sediment Exposure Pathways:** In order to clear accumulated vegetation, maintenance of the basins is occasionally completed by on-site personnel. This maintenance is done on an as-needed basis, not routinely. Procedures are in place for this maintenance and institutional controls are followed. Institutional controls are also established for any excavation work (including environmental sampling) that may occur in the plant ditches, basins, or any other surface water bodies (i.e., Salem Canal). Furthermore, PPE would be used. As a result, potential on-site industrial worker and on-site construction/excavation worker exposure to impacted surface water and sediment are not significant.

<sup>2</sup> If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

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As previously discussed, access to the Delaware River shore by recreational users is limited to watercraft access. It is highly unlikely, but possible, that an individual in a watercraft might choose to wade or swim in the shallows where SWMU 52 is located and thus be exposed to COPCs present in sediment and the water column. Given the previous considerations, it is concluded that the likelihood for such exposure is extremely low. Further, even if these exposures occurred, they would be infrequent and of such short duration as to be negligible. In addition, remedial action of the SWMU 52 intertidal zone is planned, which includes security fencing to isolate the unit from potential human contact. As a result, potential recreational user exposure to impacted surface water and sediment are not significant.

**Subsurface Soil Exposure Pathways:** Strict adherence to the permitting process described above for intrusive activities would preclude access to impacted soils without protective measures, such as PPE, to prevent exposures. As a result, exposures to on-site construction/excavation workers from impacted subsurface soil are not significant.

Additional details regarding the exposure pathway analysis can be found in Section 7 of the EI CA725 report.

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5. Can the “significant” exposures (identified in #4) be shown to be within acceptable limits?

If yes (all “significant” exposures have been shown to be within acceptable limits) – continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

If no (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.

If unknown (for any potentially “unacceptable” exposure) - continue and enter “IN” status code

Rationale and Reference(s):

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6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

X YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under control" at the DuPont Chambers Works facility, EPA ID # NJD 002385730, located at Deepwater, New Jersey under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

NO - "Current Human Exposures" are NOT "Under Control."

\_\_\_\_ TN - More information is needed to make a determination.

Completed by (signature) [Signature] Date 5/19/04  
(print) Andrew Park / Barry Tornick  
(title) Project Manager / Section Chief

Supervisor (signature) [Signature] Date 5/16/04  
(print) Adolph Everett  
(signature) [Signature] 5/28/04  
(title) Chief, RCRA Programs Branch  
EPA Region 2  
(EPA Region or State)

Locations where References may be found:

- DuPont CRG. 2003a. Second Semester 2002 Semiannual Report. April.
- DuPont CRG. 2003c. Salem Canal Seep - Risk Evaluation. July.

Contact telephone and e-mail numbers

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FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK